Thermaltake Toughpower PT 850W

Serial Number PSTPP0850FNFAPU1BLCW00029

Lab ID TT85002996

Certification ID 252996

Test Result Report ID: 25PS2996A

Certificate Issue Date: Oct 22, 2025

Scheme: ETA-EMI PSU

115V 230V

Scheme: LAMBDA PSU

115V 230V

Outside Validation Scope

General Information

Test Equipment

Electronic Loads	Chroma 63601-5 x2 Chroma 63600-2 Chroma 63640-80-80 x10 Chroma 63610-80-20
AC Sources	Chroma 6530, APM SP300VAC4000W-P, GW Instek ASR-3500
Power Analyzers	Rohde & Schwarz HMC8015 & NPA701
Oscilloscopes	Picoscope 4444, Siglent SDS2104X PLUS
Sound Analyzer	Bruel & Kjaer 2270 G4
Microphone	Bruel & Kjaer Type 4955-A
Temperature Logger	Picoscope TC-08
Tachometer	UNI-T UT372
Multimeters	Keysight 34465A
EMI Analyzer	TekBox TBMR-110M-EU
Isolation Transformer	4kVA
UPS	FSP Champ Tower 3kVA, CyberPower OLS3000E 3kVA
Testing Methodology	Cybenetics PSU Test Protocol

DUT Information(Non-accredited measurements)

Product Identification Details	
Brand	Thermaltake
Model	Toughpower PT 850W
OEM/ODM	CWT
Serial Number	PSTPP0850FNFAPU1BLCW00029
Product Specifications	
Manufacturer-Provided Information	
Rated Voltage (Vrms)	100-240
Rated Current (Arms)	12

Rated Frequency (Hz)	47-63
Rated Power (W)	850
Operating Temperature (Continuous Full Load) (°C)	
Type	ATX12V
Cable Design	Fully Modular
Warranty	-
Cybenetics Measurements	
Dimensions (W x H x D)	
Weight	
Cooling	135mm Fluid Dynamic Bearing Fan (CWT13525H12F-9)
Semi-Passive Operation	✗
Cybenetics Testing Information	
Lab ID	TT85002996
Date of receipt	Sep 23, 2025
Testing Date	Oct 16, 2025
Report Issued Date	Oct 22, 2025
Engineer Name	Okeke Ugochukwu Onyedikachukwu
Authorized By the Laboratory Technical Manager	Aristeidis Bitziopoulos
Signature	

Cables and Connectors(Non-accredited measurements)

Modular Cables				
Description	**Cable Count**	**Connector Count (Total)**	**Gauge**	Cable Type
ATX connector 24 pin (540mm)	1	1	16-20AWG	Tinned Copper
4+4 pin ATX12V (700mm)	2	2	16AWG	Tinned Copper
6+2 pin PCIe (600mm+150mm)	2	4	16-18AWG	Tinned Copper
12+4 pin PCIe (600mm) (600W)	1	1	16-24AWG	Tinned Copper
SATA (450mm+150mm+150mm)	2	6	18AWG	Tinned Copper
4-pin Molex (450mm+150mm+150mm+150mm)	1	4	18AWG	Tinned Copper
AC Power Cord (1410mm) - C13 coupler	1	1	18AWG	-

Protection Features(Manufacturer)

Over Power Protection	✓
Over Current (+12V) Protection	✓
Over Temperature Protection	✓
Short Circuit Protection	✓
Surge Protection	✓
Inrush Current Protection	✓
Fan Failure Protection	✗

Power Specifications

Rail		3.3V	5V	12V	5VSB	-12V
Max. Power	Amps	20	20	70.8	3	0.3
	Watts	110		849.6	15	3.6
Total Max. Power (W)		850				

Parts Description

General Data	
Manufacturer (OEM)	CWT
PCB Type	Double-Sided
Primary Side	
Transient Filter	4x Y caps, 2x X caps, 2x CM chokes, 1x MOV, 1x Power IntegrationsCAP200DG (X Capacitor Discharge IC)
Inrush Protection	NTC Thermistor SCK-207R0 (7 Ohm @ 25°C) & Relay
Bridge Rectifier	GBU1506 (600V, 15A @ 100°C)
APFC MOSFETs	2x Way-On WML36N65C4 (650V, 20A @ 100°C, Rds(on): 0.097Ohm)
APFC Boost Diode	CRMicro CRXI08D065G2 (650V, 8A @ 165°C)
Bulk Cap(s)	Nichicon (400V, 680uF, 2000h @ 105°C, GL)
Main Switchers	4x Silan Microelectronics SVF20N50F (500V, 12.6A @ 100°C, Rds(on): 0.27Ohm)
APFC Controller	Champion CM6500UNX
Resonant Controller	Champion CM6901T6X

Topology	Primary side: APFC, Full-Bridge & LLC Resonant Converter Secondary side: [12V] Synchronous Rectification & [Minor Rails] DC-DC converters
Secondary Side	
+12V MOSFETs	6x PingWei PWC013N04ES (40V, 155A @ 100°C, Rds(on): 1.3mOhm)
5V & 3.3V	DC-DC Converters: 4x UBIQ Semi QM3054M6 (30V, 61A @ 100°C, Rds(on): 4.8mOhm) PWM Controller(s): ANPEC APW7159C
Filtering Capacitors	Electrolytic: 2x Nippon Chemi-Con (@ 105°C, W) 3x Nichicon (4-10,000 @ 105°C, HE(M)) 3x Rubycon (6-10,000 @ 105°C, ZLH) 2x Rubycon (4-10,000 @ 105°C, YXF) Rubycon (4-10,000 @ 105°C, YXJ) Polymer: 13x Nippon Chemi-Con, 11x FPCAP, 2x no info
Fan Model	TT-13525 CWT13525H12F-9 (135mm, 12V, 0.4A, Fluid Dynamic Bearing Fan)
5VSB Circuit	
Rectifier (High Side)	Dongke DK5V45R10V (45V, 10mOhm)
Standby PWM Controller	KP22306AWG

Test Results

Temperature & Compliance Info

Temperature Range (°C /°F)	28-32 / 82.4-89.6
ErP Lot 3/6 Ready	✓
(EU) No 617/2013 Compliance	✓
ALPM (Alternative Low Power Mode) compatible	✓
ATX v3.1 PSU Power Excursion	✓

Performance Summary

115V

Accredited	
Average Efficiency (>1450 load combinations)	89.125%

Average Noise Output (>1450 Load Combinations)	12.39dBA
Average PF (>1450 Load Combinations)	0.987
Efficiency With 10W (≤500W) or 2% (>500W) Load	69.689%
Standby Power Consumption	0.0277W
Non-Accredited	
12V Ripple (Full Load)	30.41mV
5V Ripple (Full Load)	15.14mV
3.3V Ripple (Full Load)	13.19mV
5VSB Ripple (Full Load)	13.12mV
12V Load Regulation	0.72%
5V Load Regulation	0.30%
3.3V Load Regulation	0.97%
5VSB Load Regulation	4.24%
Inrush Current	23.604A

230V

Accredited	
Average Efficiency (>1450 load combinations)	91.884%
Average Noise Output (>1450 Load Combinations)	13.15dBA
Average PF (>1450 Load Combinations)	0.964
Efficiency With 10W (≤500W) or 2% (>500W) Load	68.171%
Standby Power Consumption	0.0566W
Non-Accredited	
12V Ripple (Full Load)	30.86mV
5V Ripple (Full Load)	17.90mV
3.3V Ripple (Full Load)	13.61mV
5VSB Ripple (Full Load)	13.79mV
12V Load Regulation	0.63%
5V Load Regulation	0.40%
3.3V Load Regulation	1.12%
5VSB Load Regulation	4.31%
Inrush Current	47.590A

12V Transient Response (200%)		11.46V
5V Transient Response (200%)		4.927V
3.3V Transient Response (200%)		3.239V
5VSB Transient Response (200%)		4.917V
Hold-Up Time & PWR_OK Signal		15.50ms
AC Loss to PWR_OK Hold Up Time		14.20ms
PWR_OK Inactive to DC Loss Delay		1.30ms
PSU Timings: T1 (20% / 100%)	26.0ms	27.0ms
PSU Timings: T3 (20% / 100%)	120.0ms	120.0ms
12V OCP (31.4°C / 42.3°C)	89.80A (126.84%), 11.976V	97.80A (138.14%), 11.971V
5V OCP (31.4°C / 42.3°C)	23.5A (117.50%), 5.018V	23.5A (117.50%), 5.021V
3.3V OCP (31.4°C / 42.3°C)	24.5A (122.50%), 3.305V	24.3A (121.50%), 3.309V
5VSB OCP (31.4°C / 42.3°C)	4.6A (153.33%), 4.903V	4.5A (150.00%), 4.9V
OPP (27.55°C / 40.39°C)	124.77%	123.60%

Hold-Up Time & PWR_OK Signal

Hold-Up Time (ms)	15.5
AC Loss to PWR_OK Hold Up Time (ms)	14.2
PWR_OK Inactive to DC Loss Delay (ms)	1.3

Vampire Power

Tables

115V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	115.00 V	114.97 V	113.85 V	115.04 V	116.15 V	PASS
Mains Frequency:	60.00 Hz	59.99 Hz	59.40 Hz	60.01 Hz	60.60 Hz	PASS
Mains Voltage CF:	1.416	1.415	1.340	1.417	1.490	PASS

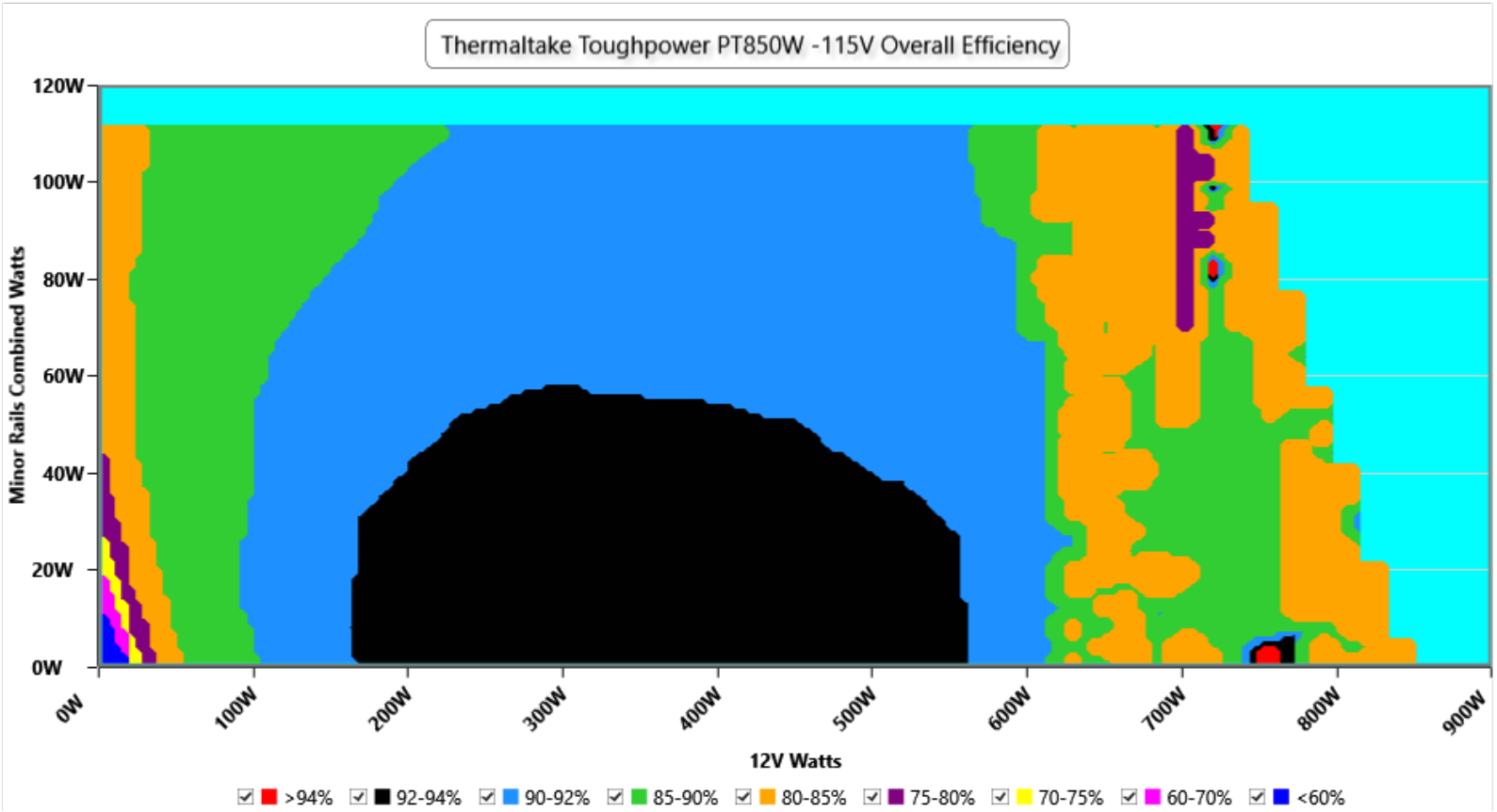
Mains Voltage THD:	0.13 %	0.11 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.028 W	-0.005 W	N/A	0.055 W	N/A	N/A
Apparent Power:	10.062 W	10.039 W	N/A	10.085 W	N/A	N/A
Power Factor:	0.003	N/A	N/A	N/A	N/A	N/A

230V

Detailed Results						
	Average	Min	Limit Min	Max	Limit Max	Result
Mains Voltage RMS:	230.00 V	229.95 V	227.70 V	230.04 V	232.30 V	PASS
Mains Frequency:	50.00 Hz	50.00 Hz	49.50 Hz	50.00 Hz	50.50 Hz	PASS
Mains Voltage CF:	1.415	1.415	1.340	1.416	1.490	PASS
Mains Voltage THD:	0.14 %	0.13 %	N/A	0.16 %	2.00 %	PASS
Real Power:	0.057 W	0.022 W	N/A	0.128 W	N/A	N/A
Apparent Power:	32.938 W	32.895 W	N/A	32.981 W	N/A	N/A
Power Factor:	0.002	N/A	N/A	N/A	N/A	N/A

Efficiency Graph

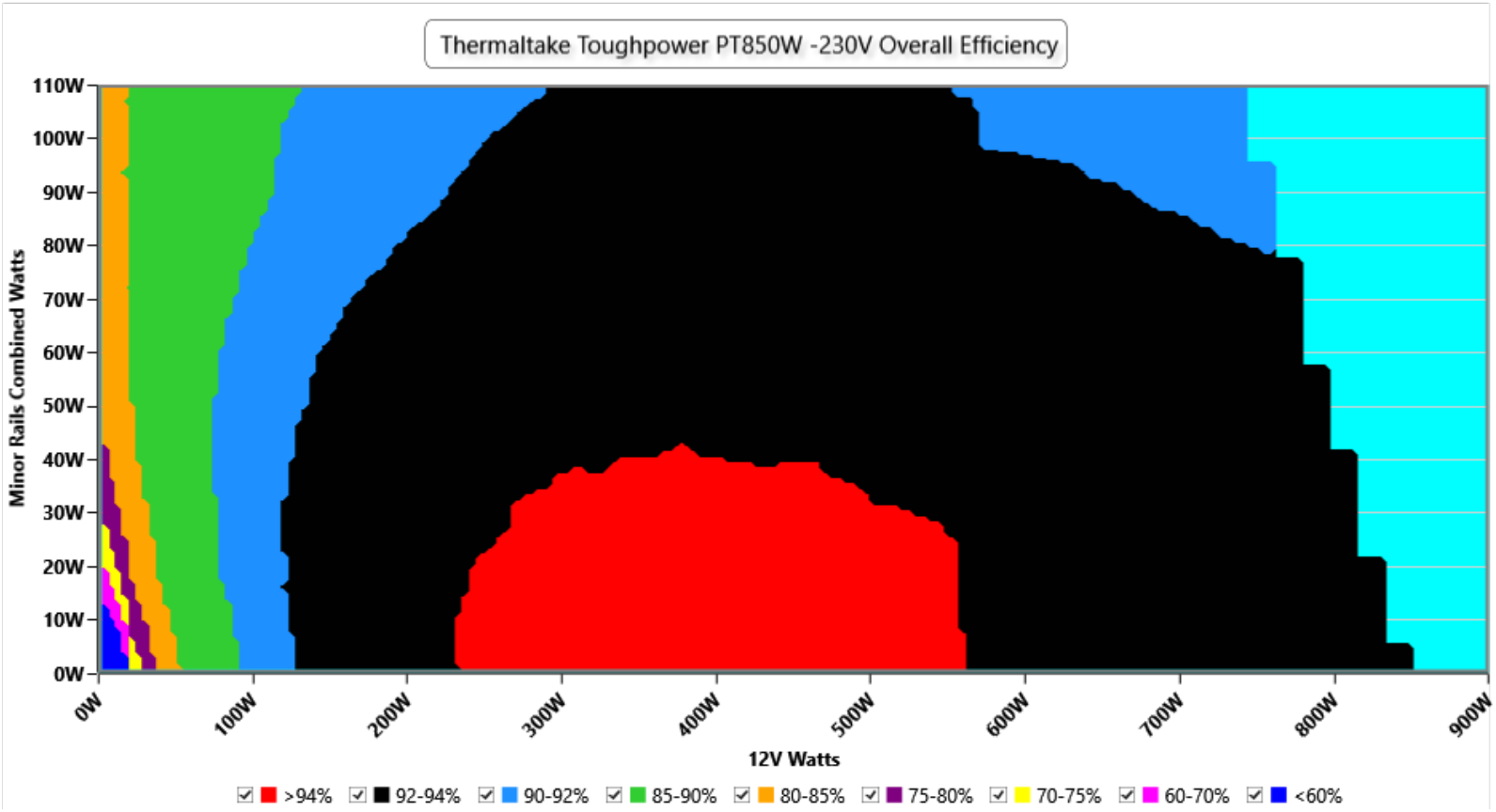
115V



INFO

This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

230V

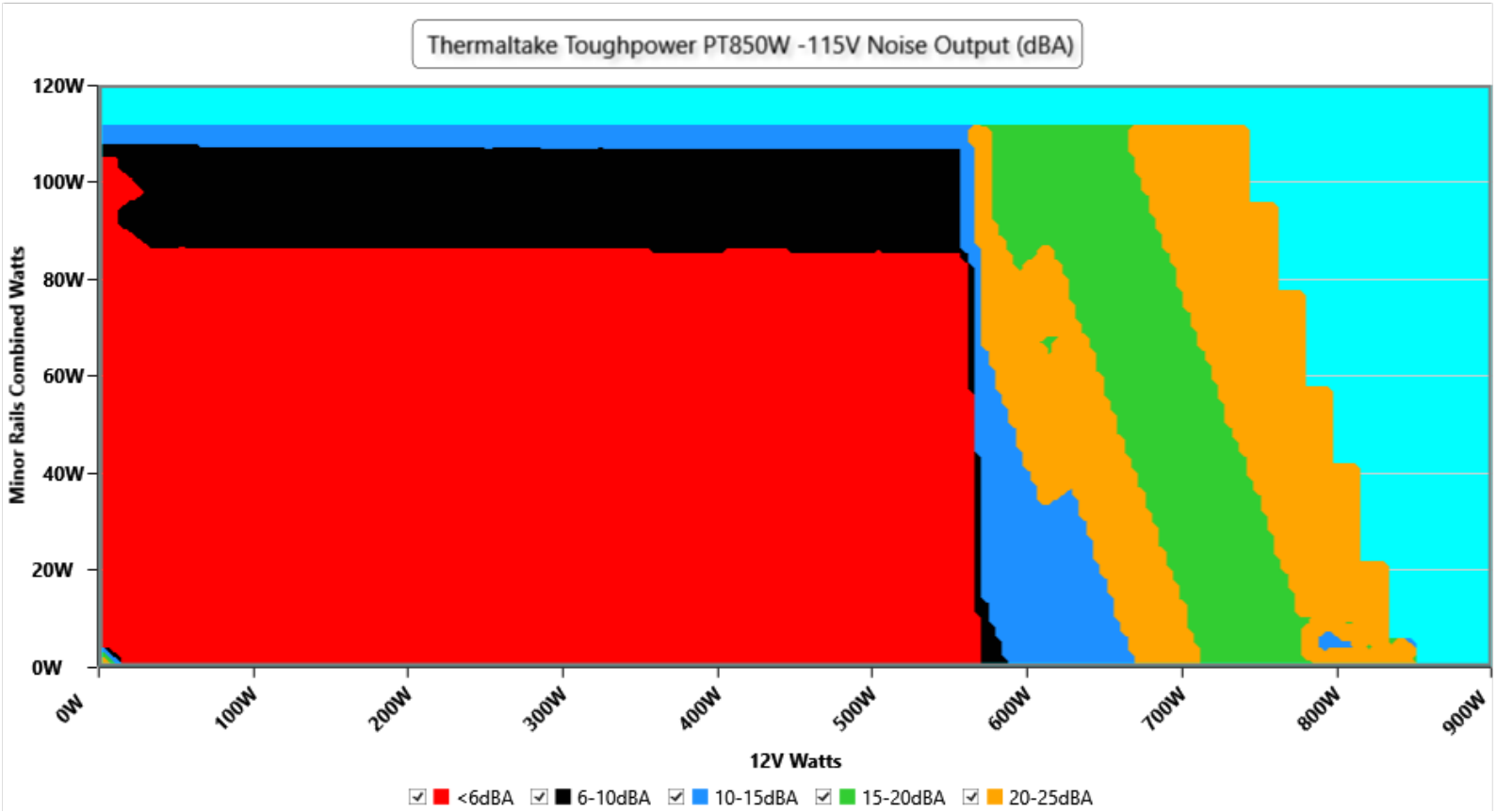


INFO

This graph depicts the PSU`s efficiency throughout its entire operational range. For the generation of the efficiency and noise graphs we set our loaders to auto mode through our custom-made software before trying thousands of possible load combinations

Noise Graph

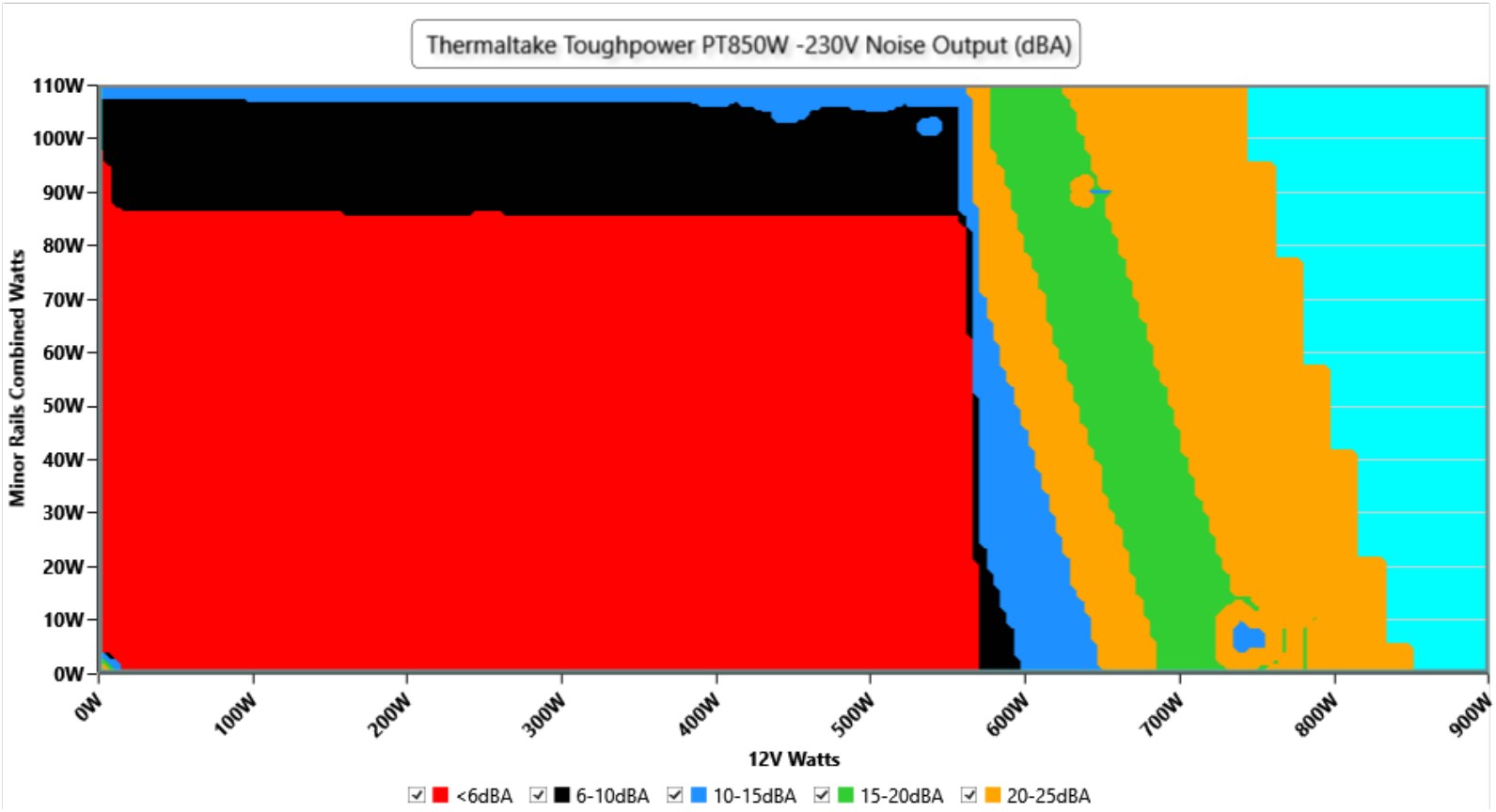
115V



INFO

The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

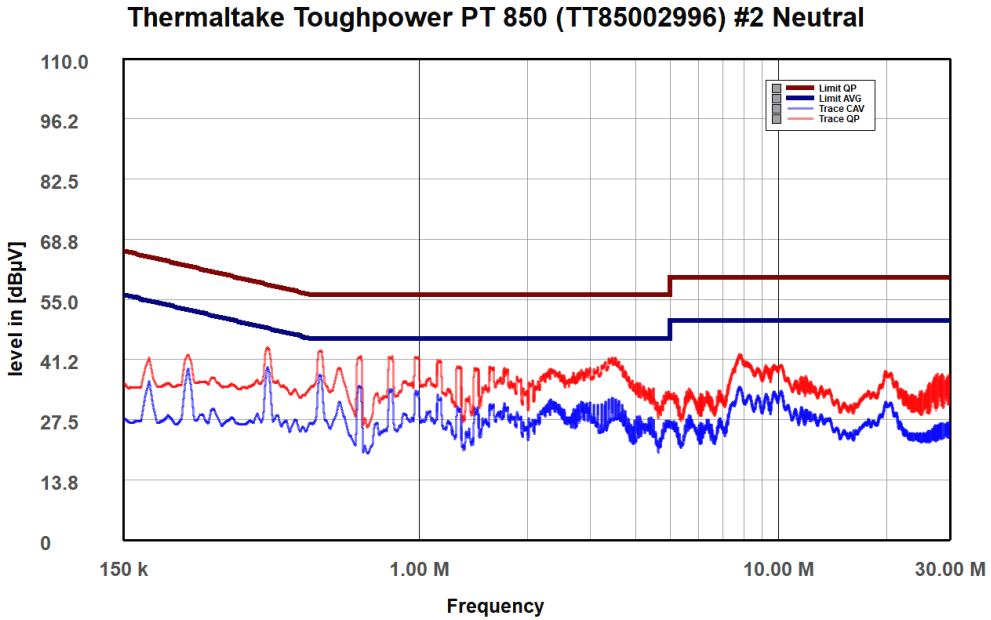
230V



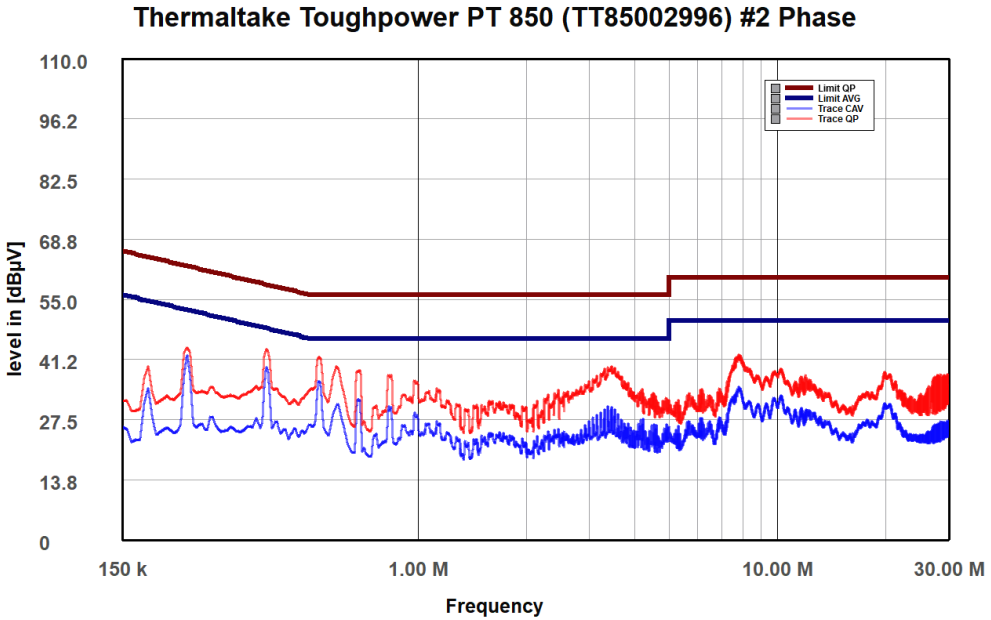
INFO

The PSU`s noise in its entire operational range and under 30-32 °C ambient is depicted in this graph. The X axis represents the load on the +12V rail(s) while the Y axis is the load on the minor rails

Conducted Emissions EN 55032 & CISPR 32



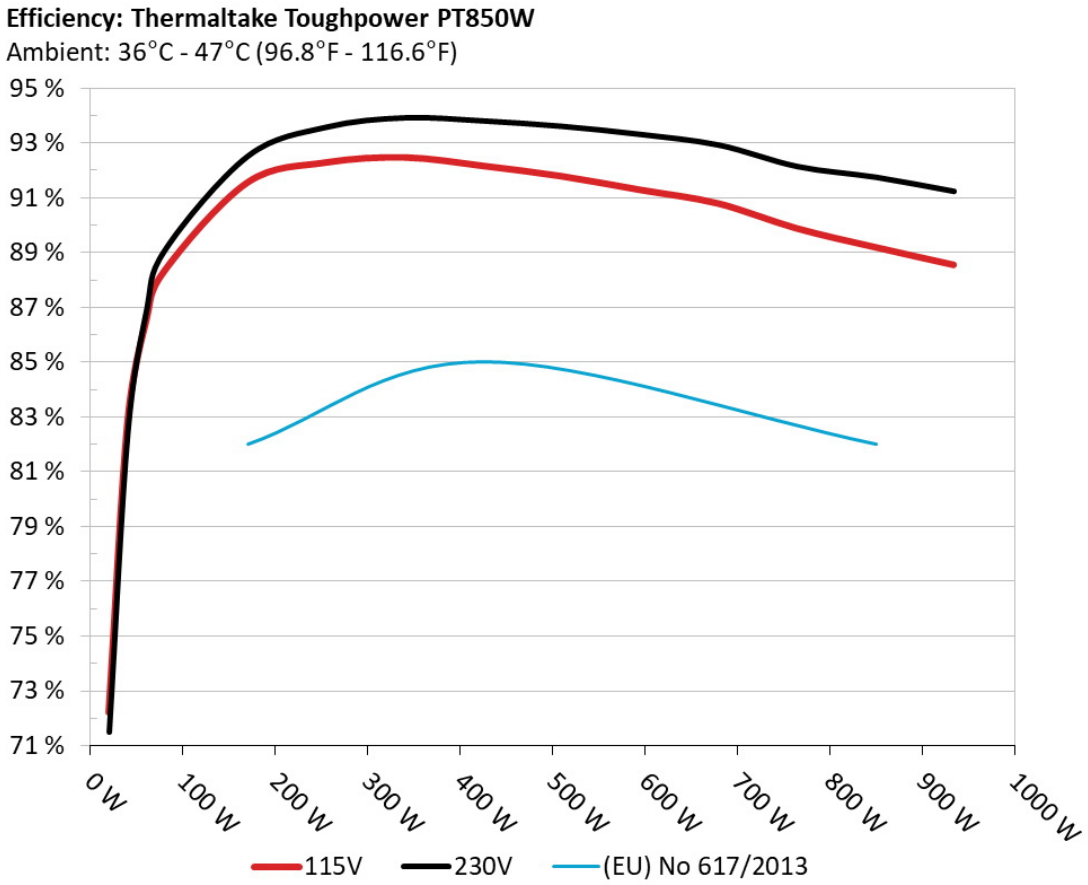
NEUTRAL



PHASE

Indicative Performance

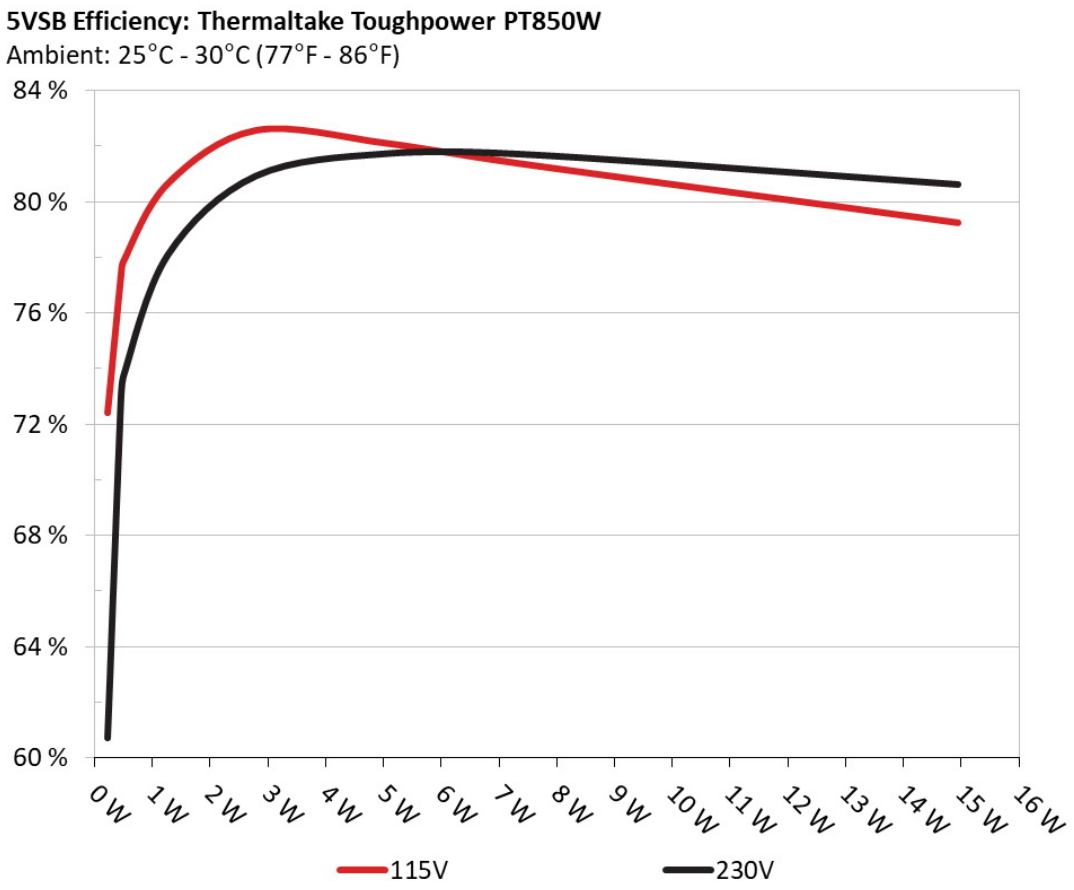
Efficiency under high ambient temperature



INFO

The PSU`s efficiency under high ambient temperatures with 115V and 230V input. For this graph the results of the 10-110% load regulation table are used

5VSB Efficiency



INFO

This graph depicts the efficiency levels of the 5VSB rail with 115V and 230V input

5VSB Efficiency (ERP LOT 3/6 & CEC)

115V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.229W	72.416%	0.032
	5.097V	0.316W		115.09V
2	**0.09A**	0.459W	77.324%	0.059
	5.095V	0.594W		115.09V
3	**0.55A**	2.792W	82.56%	0.267
	5.078V	3.382W		115.09V
4	**1A**	5.06W	82.097%	0.373
	5.06V	6.164W		115.09V
5	**1.5A**	7.56W	81.31%	0.431
	5.04V	9.298W		115.08V
6	**3A**	14.939W	79.245%	0.499
	4.979V	18.853W		115.07V

230V

Test #	5VSB	DC/AC (Watts)	Efficiency	PF/AC Volts
1	**0.045A**	0.229W	60.714%	0.01
	5.098V	0.323W		230.29V
2	**0.09A**	0.459W	72.884%	0.019
	5.096V	0.63W		230.27V
3	**0.55A**	2.793W	80.911%	0.101
	5.078V	3.453W		230.25V
4	**1A**	5.06W	81.715%	0.17
	5.06V	6.193W		230.25V
5	**1.5A**	7.561W	81.674%	0.231
	5.04V	9.256W		230.25V
6	**3A**	14.94W	80.606%	0.344
	4.98V	18.535W		230.25V

Protection Features

OCP (Normal @ 31.4°C)	12V: 89.80A (126.84%), 11.976V 5V: 23.5A (117.50%), 5.018V 3.3V: 24.5A (122.50%), 3.305V 5VSB: 4.6A (153.33%), 4.903V
OCP (Hot @ 42.3°C)	12V: 97.80A (138.14%), 11.971V 5V: 23.5A (117.50%), 5.021V 3.3V: 24.3A (121.50%), 3.309V 5VSB: 4.5A (150.00%), 4.9V
OPP (Normal @ 27.6°C)	1060.50W (124.77%)
OPP (Hot @ 40.4°C)	1050.62W (123.60%)
OTP	✓ (145°C @ Heat Sink)
SCP	12V to Earth: ✓ 5V to Earth: ✓ 3.3V to Earth: ✓ 5VSB to Earth: ✓ -12V to Earth: ✓
PWR_OK	Proper Operation
UVP (Full Load @ 90V)	✓
UVP (No Damage @ 80V)	✓
Conducted Emissions EN55032 & CISPR 32	✓
NLO	✓
Fan Failure Protection	✗
SIP	Surge: MOV Inrush: NTC & Bypass Relay

Supplementary Tests (For Reference)

Typical Load Tests

115V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	**5.258A**	**1.994A**	**1.982A**	**0.991A**	85.003	88.034%	397	<6.0	40.1°C	0.98
	12.060V	5.015V	3.33V	5.047V	96.54				45.49°C	115.06V
20%	**11.536A**	**2.993A**	**2.976A**	**1.193A**	169.938	91.547%	396	<6.0	40.63°C	0.99
	12.051V	5.012V	3.326V	5.03V	185.629				47.39°C	115.02V
30%	**18.174A**	**3.493A**	**3.476A**	**1.396A**	254.938	92.28%	396	<6.0	41.29°C	0.993
	12.044V	5.01V	3.323V	5.014V	276.263				50.41°C	115V
40%	**24.827A**	**3.994A**	**3.976A**	**1.601A**	340.028	92.465%	398	<6.0	41.88°C	0.993
	12.036V	5.009V	3.32V	4.997V	367.735				54.05°C	114.97V
50%	**31.120A**	**4.994A**	**4.975A**	**1.808A**	424.828	92.158%	400	<6.0	42.06°C	0.993
	12.028V	5.006V	3.317V	4.98V	460.977				58.21°C	114.93V
60%	**37.401A**	**5.996A**	**5.976A**	**2A**	509.288	91.782%	400	<6.0	42.5°C	0.995
	12.020V	5.004V	3.313V	4.962V	554.889				63.01°C	114.91V
70%	**43.753A**	**6.999A**	**6.98A**	**2.226A**	594.679	91.283%	449	<6.0	43.43°C	0.996
	12.012V	5.002V	3.31V	4.942V	651.467				68.34°C	114.88V
80%	**50.142A**	**7.994A**	**7.981A**	**2.334A**	679.547	90.783%	469	<6.0	39.18°C	0.997
	11.999V	5.004V	3.308V	4.927V	748.536				65.56°C	114.82V
90%	**56.908A**	**8.493A**	**8.473A**	**2.44A**	764.848	89.871%	839	20.6	39.18°C	0.997
	11.991V	5.004V	3.304V	4.917V	851.054				65.23°C	114.82V
100%	**63.440A**	**8.994A**	**8.994A**	**3.075A**	849.68	89.186%	951	24.2	40.01°C	0.998
	11.979V	5.003V	3.302V	4.878V	952.698				67.4°C	114.78V
110%	**69.805A**	**9.995A**	**10.094A**	**3.082A**	934.243	88.546%	1033	27.3	40.91°C	0.998
	11.976V	5.002V	3.299V	4.868V	1055.092				69.96°C	114.75V
CL1	**0.116A**	**13.229A**	**13.174A**	**0A**	111.29	82.901%	641	13	41.85°C	0.986
	12.056V	5.004V	3.317V	5.068V	134.246				56.11°C	115.05V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
CL2	**0.115A**	**19.986A**	**0A**	**0A**	101.368	81.23%	1646	39.8	40.43°C	0.985
	12.060V	5.002V	3.331V	5.078V	124.791				45.9°C	115.05V
CL3	**0.115A**	**0A**	**19.921A**	**0A**	67.379	74.646%	1585	40	41.44°C	0.978
	12.057V	5.014V	3.313V	5.075V	90.266				45.41°C	115.06V
CL4	**70.822A**	**0A**	**0A**	**0A**	849.461	84.119%	1110	29	46.03°C	0.981
	11.995V	5.005V	3.311V	5.028V	943.7				65.1°C	114.78V

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
10%	**5.258A**	**1.994A**	**1.982A**	**0.991A**	85.01	88.963%	396	<6.0	40.46°C	0.863
	12.059V	5.015V	3.329V	5.045V	95.554				45.04°C	230.2V
20%	**11.538A**	**2.993A**	**2.977A**	**1.193A**	169.96	92.501%	396	<6.0	40.8°C	0.944
	12.051V	5.013V	3.326V	5.028V	183.741				46.64°C	230.19V
30%	**18.178A**	**3.493A**	**3.477A**	**1.397A**	254.97	93.559%	398	<6.0	41.43°C	0.966
	12.043V	5.011V	3.322V	5.012V	272.523				48.7°C	230.18V
40%	**24.831A**	**3.993A**	**3.977A**	**1.602A**	340.065	93.901%	399	<6.0	41.57°C	0.976
	12.035V	5.01V	3.319V	4.995V	362.154				51.33°C	230.16V
50%	**31.132A**	**4.994A**	**4.977A**	**1.809A**	424.928	93.787%	400	<6.0	42.26°C	0.981
	12.027V	5.008V	3.316V	4.977V	453.078				54.04°C	230.15V
60%	**37.411A**	**5.995A**	**5.979A**	**2A**	509.371	93.593%	400	<6.0	42.75°C	0.984
	12.019V	5.006V	3.312V	4.959V	544.241				57.04°C	230.13V
70%	**43.765A**	**6.996A**	**6.983A**	**2.228A**	594.772	93.297%	463	<6.0	43.4°C	0.986
	12.011V	5.004V	3.308V	4.939V	637.505				60.67°C	230.11V
80%	**50.126A**	**7.998A**	**7.989A**	**2.336A**	679.564	92.907%	700	20.3	43.7°C	0.988
	12.003V	5.001V	3.304V	4.924V	731.449				60.47°C	230.09V
90%	**56.894A**	**8.502A**	**8.484A**	**2.444A**	764.985	92.123%	1067	27.1	44.8°C	0.99
	11.996V	4.999V	3.3V	4.911V	830.398				58.84°C	230.08V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
100%	**63.399A**	**9.008A**	**9.009A**	**3.076A**	849.754	91.732%	1399	35.7	45.06°C	0.991
	11.989V	4.996V	3.296V	4.876V	926.35				58.45°C	230.12V
110%	**69.780A**	**10.012A**	**10.112A**	**3.082A**	934.281	91.217%	1771	42	46.67°C	0.992
	11.981V	4.994V	3.293V	4.868V	1024.239				58.83°C	230.16V
CL1	**0.115A**	**13.213A**	**13.176A**	**0A**	111.288	83.969%	651	13.8	40.77°C	0.915
	12.054V	5.01V	3.316V	5.067V	132.538				52.56°C	230.32V
CL2	**0.115A**	**19.949A**	**0A**	**0A**	101.371	81.941%	1650	39.9	41.45°C	0.906
	12.058V	5.012V	3.33V	5.077V	123.713				46.26°C	230.33V
CL3	**0.115A**	**0A**	**19.922A**	**0A**	67.379	75.353%	1560	39.2	40.44°C	0.85
	12.055V	5.013V	3.313V	5.074V	89.416				44.17°C	230.34V
CL4	**70.805A**	**0A**	**0A**	**0A**	849.512	92.611%	1240	33	45.48°C	0.991
	11.998V	5.003V	3.31V	5.024V	917.296				59.05°C	230.21V

The results above are not used in the certification process

Light Load Tests

115V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20W	**1.232A**	**0.498A**	**0.495A**	**0.197A**	20.006	72.205%	391	<6.0	36°C	0.898
	12.065V	5.017V	3.334V	5.085V	27.708				45.79°C	115.08V
40W	**2.710A**	**0.698A**	**0.693A**	**0.295A**	40.002	82.701%	393	<6.0	37.12°C	0.951
	12.064V	5.016V	3.333V	5.08V	48.367				43.76°C	115.07V
60W	**4.190A**	**0.897A**	**0.891A**	**0.394A**	60	86.446%	397	<6.0	38.44°C	0.967
	12.062V	5.015V	3.332V	5.075V	69.405				43.77°C	115.06V
80W	**5.664A**	**1.097A**	**1.09A**	**0.493A**	79.943	88.311%	397	<6.0	39.14°C	0.978
	12.060V	5.015V	3.331V	5.069V	90.526				44.56°C	115.06V

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	DC/AC (Watts)	Efficiency	Fan Speed (RPM)	PSU Noise (dB[A])	Temps (In/Out)	PF/AC Volts
20W	**1.232A**	**0.498A**	**0.495A**	**0.197A**	20.005	71.479%	390	<6.0	36.92°C	0.491
	12.064V	5.016V	3.333V	5.086V	27.988				38.64°C	230.21V
40W	**2.710A**	**0.698A**	**0.693A**	**0.295A**	40.005	82.394%	394	<6.0	37.02°C	0.687
	12.062V	5.016V	3.332V	5.08V	48.554				40.18°C	230.21V
60W	**4.190A**	**0.897A**	**0.892A**	**0.394A**	60.005	86.807%	397	<6.0	38.5°C	0.789
	12.061V	5.016V	3.331V	5.074V	69.134				41.99°C	230.21V
80W	**5.666A**	**1.097A**	**1.09A**	**0.493A**	79.956	89.055%	397	<6.0	39°C	0.85
	12.059V	5.015V	3.331V	5.068V	89.783				43.09°C	230.2V

The results above are not used in the certification process

Ripple Measurements

115V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	17.22mV	11.95mV	9.98mV	10.74mV	Pass
20% Load	23.20mV	12.05mV	11.89mV	11.30mV	Pass
30% Load	25.98mV	13.75mV	10.97mV	12.28mV	Pass
40% Load	28.77mV	13.70mV	11.33mV	11.67mV	Pass
50% Load	31.19mV	14.32mV	11.38mV	12.18mV	Pass
60% Load	32.63mV	13.24mV	11.53mV	12.23mV	Pass
70% Load	34.28mV	13.39mV	11.74mV	12.54mV	Pass
80% Load	36.04mV	13.81mV	12.98mV	13.06mV	Pass
90% Load	31.40mV	17.05mV	14.94mV	18.17mV	Pass
100% Load	30.41mV	15.14mV	13.19mV	13.12mV	Pass
110% Load	31.83mV	18.45mV	15.57mV	17.60mV	Pass
Crossload1	20.58mV	14.18mV	11.70mV	10.31mV	Pass
Crossload2	20.57mV	15.46mV	11.63mV	10.74mV	Pass

Test	12V	5V	3.3V	5VSB	Pass/Fail
Crossload3	17.63mV	11.90mV	12.57mV	10.27mV	Pass
Crossload4	30.23mV	16.44mV	13.85mV	16.74mV	Pass

The results above are not used in the certification process

230V

Test	12V	5V	3.3V	5VSB	Pass/Fail
10% Load	19.18mV	13.24mV	11.74mV	12.28mV	Pass
20% Load	24.08mV	14.22mV	12.36mV	12.13mV	Pass
30% Load	27.07mV	14.68mV	11.63mV	12.65mV	Pass
40% Load	28.82mV	14.99mV	12.56mV	12.28mV	Pass
50% Load	30.62mV	15.20mV	12.31mV	12.39mV	Pass
60% Load	32.58mV	14.58mV	12.20mV	12.75mV	Pass
70% Load	35.06mV	14.01mV	12.82mV	13.21mV	Pass
80% Load	38.25mV	14.47mV	13.08mV	13.21mV	Pass
90% Load	30.57mV	16.38mV	13.65mV	14.09mV	Pass
100% Load	30.86mV	17.90mV	13.61mV	13.79mV	Pass
110% Load	31.63mV	17.13mV	14.37mV	14.31mV	Pass
Crossload1	20.78mV	14.90mV	12.73mV	11.05mV	Pass
Crossload2	21.76mV	16.79mV	12.72mV	11.36mV	Pass
Crossload3	18.15mV	12.62mV	14.79mV	11.30mV	Pass
Crossload4	29.84mV	15.05mV	13.06mV	12.75mV	Pass

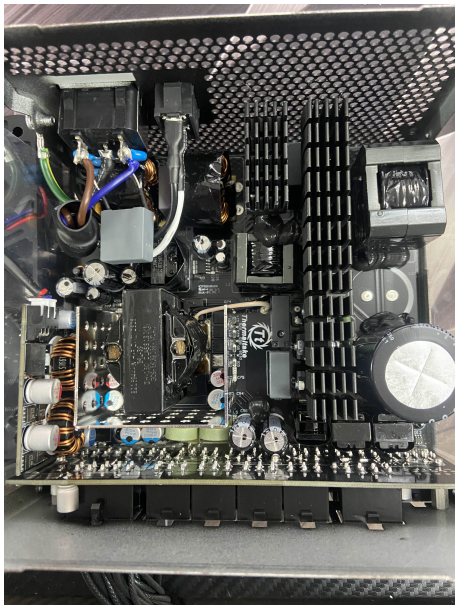
The results above are not used in the certification process

Thermaltake Toughpower PT 850W

Top side

Power specifications label

Fan



PSU Internals

All data and graphs included in this test report can be used by any individual on the following conditions:
› It should be mentioned that the test results are provided by Cybenetics
› The link to the original test results document should be provided in any case

Cybenetics runs voluntary certification programs for power supplies - ETA for efficiency, LAMBDA for noise and SAFE for safety and correct operation - and for cooling products, with DELTA for chassis soundproofing and PHI for fan airflow and static pressure. THETA rates cooler performance on AMD AM5 and Intel LGA1851 outside ISO 17065 and accreditation scope

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